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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,191

02/25/2004

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040405-0367

7417

22428 7590 03/28/2008  
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EXAMINER

RICHARDSON, THOMAS W

ART UNIT

PAPER NUMBER

2144

MAIL DATE

DELIVERY MODE

03/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/785,191	<b>Applicant(s)</b> FUJITA ET AL.	
	<b>Examiner</b> THOMAS RICHARDSON	<b>Art Unit</b> 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 1-16, 28-45, and 51-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-27, 46-50 and 53-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>25 February 2004, 16 May 2005, 27 June 2005, 31 January 2006, 17 April 2006, 4 May 2006, 15 May 2006</u> | 6) <input type="checkbox"/> Other: _____  |



### **DETAILED ACTION**

Claims 1-55 are pending for examination.

Claims 1-16, 28-45, and 51-52 are withdrawn from consideration due to non-election in restriction.

Claims 17-27, 46-50, and 53-55 are rejected.

### ***Election/Restrictions***

1. Claims 1-16, 28-45, and 50-51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group I (DNS server), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 09 January 2008.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17, 18, 21, 46, 47, 50, and 53-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims are directed toward a packet transfer device transferring a packet to "other node," which is an indefinite term. Examiner assumes applicant to mean packet is transferred to a separate external node.

4. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim makes reference to "said external database server."

There is insufficient antecedent basis for this limitation in the claim. Examiner assumes applicant to mean that the name resolution server of claim 21 is external to the packet forwarder.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 46-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims are directed toward a computer program, which is non-statutory subject matter. Examiner suggests amending claims such that computer program is embedded on a computer-readable storage medium to avoid issues regarding non-statutory subject matter.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 17-26, 46-50, and 53-55 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7 334 049, Sumasundaram et al.

8. As per claim 17, Sumasundaram teaches a packet transfer device which transfers a received packet to other node, wherein

control of a packet transfer method as a method of transferring said received packet to said other node is conducted based on information contained in a name resolution response message transmitted from a name resolution server to a client (Figure 4, steps 404 and 406, also column 7, line 63 to column 8, line 6, where a binding is created between the address given by the DNS in the DNS payload and the selected pool address).

9. As per claim 19, Sumasundaram teaches the packet transfer device as set forth in claim 17, wherein

said packet transfer method includes at least one of packet transfer priority, a logical network ID, a logical channel ID, and header rewriting, addition and deletion methods (column 8, lines 7-23, where the header and address information is rewritten for a device when an address translation is required).

10. As per claim 18, Sumasundaram teaches a packet transfer device which transfers a received packet to other node, comprising

a DNS proxy unit which once receives a name resolution response message transmitted from a name resolution server to a client and rewrites the contents of a routing table in which a packet transfer method as a method of transferring said received packet to said other node is held based on information contained in said name resolution response message (Figure 4, steps 404 and 406, also column 7, line 63 to column 8, line 6, where a binding is created between the address given by the DNS in the DNS payload and the selected pool address).

11. As per claim 20, Sumasundaram teaches the packet transfer device as set forth in claim 18, wherein

in response to said name resolution response message once received, said DNS proxy unit deletes information regarding said packet transfer method among information contained in said name resolution response message to transmit said name resolution response message obtained to said client (column 8, lines 7-23, where the header and address information is rewritten for a device when an address translation is required. This rewriting necessitates deleting the old information relating to the forwarding address to create a new entry for the address).

12. As per claim 22, Sumasundaram teaches the packet transfer device as set forth in claim 18, further comprising

a user information obtaining unit which obtains attribute information regarding a sender of a name resolution request message transmitted from said client to said name resolution server (column 7, lines 31-47, where the NAT receives the DNS request from the Host, which reveals its private address, which is replaced with a source address from the NAT pool), wherein

said DNS proxy unit once receives said name resolution request message, obtains attribute information regarding the sender of said name resolution request message through said user information obtaining unit and transmits said name resolution request message with said attribute information added to said name resolution server (column 7, lines 31-47, where the NAT receives the DNS request from

the Host, which reveals its private address, which is replaced with a source address from the NAT pool).

13. As per claim 21, Sumasundaram teaches a packet transfer device which transfers a received packet to other node, comprising:

a user information obtaining unit which obtains attribute information regarding a user as a sender of a name resolution request message transmitted from a client to a name resolution server (column 7, lines 31-47, where the NAT receives the DNS request from the Host, which reveals its private address, which is replaced with a source address from the NAT pool), and

a DNS proxy unit which once receives said name resolution request message, obtains attribute information regarding the user of said name resolution request message through said user information obtaining unit and adding said attribute information to said name resolution request message to transmit said name resolution request message obtained to said name resolution server (column 7, lines 31-47, where the NAT receives the DNS request from the Host, which reveals its private address, which is replaced with a source address from the NAT pool).

14. As per claim 23, Sumasundaram teaches the packet transfer device as set forth in claim 21, further comprising,

as an internal element, a user information database in which said attribute information is stored (Figure 6, also column 8, lines 24-48, where the NAT contains a translation database), wherein



said user information obtaining unit obtains said attribute information from said user information database (column 7, lines 31-47, where the NAT receives the DNS request from the Host, which reveals its private address, which is replaced with a source address from the NAT pool, which is the translation database of Figure 6).

15. As per claim 24, Sumasundaram teaches the packet transfer device as set forth in claim 21, wherein

said user information obtaining unit obtains said attribute information from an external database server having a user information database in which said attribute information is stored (Figure 8, where the memory and processors are separated from the interfaces by a BUS).

16. As per claim 25, Sumasundaram teaches the packet transfer device as set forth in claim 24, wherein

said user information obtaining unit uses a name resolution request message in obtaining said attribute information from said external database server (Figure 4, steps 404 and 406, also column 7, line 63 to column 8, line 6, where a binding is created between the address given by the DNS in the DNS payload and the selected pool address).

17. As per claim 26, Sumasundaram teaches the packet transfer device as set forth in claim 21, wherein

**said external database server** is a name resolution server externally disposed (Figure 1, also column 7, lines 31-62, where the host 102a sends a name resolution request message to the DNS server 122, which are on different subnetworks).

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18. Claims 46-50 are substantially the same as claims 17-21, directed toward a computer program rather than a system. Sumasundaram teaches a computer program product as well as a system (column 3, lines 44-50). For this reason, program claims 46-50 are rejected under the same basis as system claims 17-21.

19. Claims 53-55 are substantially the same as claims 17, 18, and 21, respectively, directed toward a method rather than a system. Sumasundaram teaches a method as well as a system (abstract). For this reason, method claims 53-55 are rejected under the same basis as system claims 17, 18, and 21.

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 7 334 049, Sumasundaram et al as applied to claim 23 above, and further in view of US 7 103 663, Inoue et al.

23. As per claim 27, Sumasundaram teaches the packet transfer device as set forth in claim 23

Sumasundaram does not teach a user authentication module for maintaining information about a user at a device. Inoue teaches a license management system comprising:

- a user authentication unit which identifies and authenticates a user at a client connected to its own node (column 6, lines 19-27, where the information management unit authenticates a user via a user ID), and

- a user information updating unit which updates the contents of said user information database based on attribute information regarding said user obtained at the time of authentication (column 6, lines 34-40, where the user information management unit registers personal information supplied by the users in a user database).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a user authentication module and database such as that taught by Inoue in a network address translation system such as that taught by Sumasundaram. AN authentication module and user database would allow a user on a device to access content on the device that may be protected by means of a rights management server (Inoue, column 5, lines 42-44). This would be beneficial in a system such as that taught by Sumasundaram, as it would allow a step of authentication for a user prior to that user being able to access, modify, or request addressing information, which is well known in the art to generally be protected data on a device.

***Conclusion***

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7 334 048, Guan et al teaches a method and apparatus for fast route table update.

US 7 080 148, Weigand teaches a translating switch and method.

US 7 328 281, Takeda et al teaches address translation equipment and method.

US 7 047 313, Broerman teaches a method for redirecting packets to a different destination.

US 6 892 245, Crump et al teaches a management information base for network address translation.

US 2002/0035639, Xu teaches a system and method for a packet director.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS RICHARDSON whose telephone number is (571) 270-1191. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR

3/24/2008

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144